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(71) Applicant (for all designated States except US): **B.D.H. INDUSTRIES INC.** [CA/CA]; 200, Clément-Gilbert, Saguenay, Québec, CA G7H 5B1 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **AUDET, Daniel** [CA/CA]; 3430, Du Muguët, Chicoutimi, Québec, CA G7S 5W5 (CA). **PARENT, Luc** [CA/CA]; 1029, rue Melançon, Chicoutimi, Québec, CA G7H 1N8 (CA).

(74) Agent: **OGILVY RENAULT**; Suite 1600, 1981 McGill College Avenue, Montreal, Québec H3A 2Y3 (CA).

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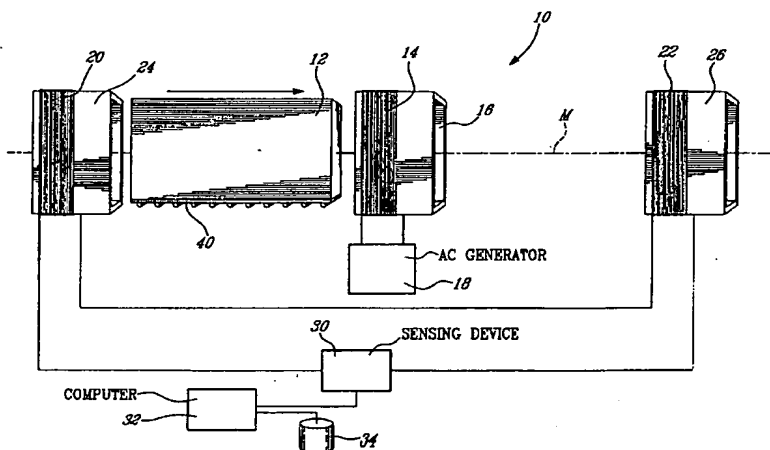
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(54) Title: **SYSTEM AND METHOD TO FORECAST THE ELECTRICAL CONDUCTIVITY OF ANODES FOR ALUMINUM PRODUCTION BEFORE BAKING**



(57) Abstract: The system (10) and the method are used for forecasting the electrical conductivity of an anode (12) for aluminum production before the anode (12) is baked. In the system (10), at least one receiving coil (20,22) is coupled to an electromagnetic field emitting unit (14,18). A sensing device (30) is connected to the receiving coil (20,22), the sensing device (30) outputting a signal indicative of a variation of the electromagnetic field received by the receiving coil (20,22) as the crude anode (12), or a portion thereof, passes inside the receiving coil (20,22). A value indicative of the electrical conductivity of the anode (12) is then calculated using the signal from the sensing device (30) and signals previously obtained using reference anodes (12). This way, the electrical conductivity of the anodes (12) can be forecasted before the crude anodes (12) are baked.

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